

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/430,877	11/01/1999	JEFFREY A. MORGAN	10981028-1	7874		
75	7590 11/05/2003		EXAMI	EXAMINER		
IP ADMINISTRATION			GROSS, KENNETH A			
LEGAL DEPARTMENT 20BN HEWLETT PACKARD COMPANY			ART UNIT	PAPER NUMBER		
P O BOX 10301			2122	17		
PALO ALTO, CA 943030890			DATE MAILED: 11/05/2003			

Please find below and/or attached an Office communication concerning this application or proceeding.

					<b>♂</b>
		Application No.		Applicant(s)	
Office Action Summary		09/430,877		MORGAN, JEFFREY	<b>\</b> .
		Examiner		Art Unit	
		Kenneth A Gross		2122	
Period fo	The MAILING DATE of this communication ap or Reply	ppears on the cover s	sheet with the co	orrespondence addres	s
THE   - External exte	ORTENED STATUTORY PERIOD FOR REPAMAILING DATE OF THIS COMMUNICATION assions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reperiod for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statuely received by the Office later than three months after the mailing date of the provided by the Office later than three months after the mailing date of the provided by the Office later than three months.	.136(a). In no event, however ply within the statutory minim is will apply and will expire Si te, cause the application to b	er, may a reply be time num of thirty (30) days X (6) MONTHS from t ecome ABANDONED	ely filed will be considered timely. he mailing date of this commun (35 U.S.C. § 133).	ication.
1)🖂	Responsive to communication(s) filed on 12	August 2003 .			
2a)□		his action is non-fina	al.		
3)[]	Since this application is in condition for allow closed in accordance with the practice unde on of Claims	vance except for for r <i>Ex part</i> e Quayle, 1	mal matters, pro 935 C.D. 11, 49	osecution as to the me 53 O.G. 213.	erits is
4)🖂	Claim(s) 1-12 is/are pending in the application	n.			
	4a) Of the above claim(s) is/are withdra	awn from considerat	ion.		
5)□	Claim(s) is/are allowed.				
6)⊠	Claim(s) <u>1-12</u> is/are rejected.				
	Claim(s) is/are objected to.				
	Claim(s) are subject to restriction and/	or election requirem	ent.		
	on Papers				
9)□	The specification is objected to by the Examin	er.			
10)[	The drawing(s) filed on is/are: a) acc	epted or b) objected	to by the Exan	niner.	
	Applicant may not request that any objection to t	he drawing(s) be held	in abeyance. Se	e 37 CFR 1.85(a).	
11)□	The proposed drawing correction filed on	_ is: a)□ approved	b) disapprov	ed by the Examiner.	
	If approved, corrected drawings are required in re	eply to this Office actio	n.		
12) 🗌 .	The oath or declaration is objected to by the E	xaminer.			
Priority ι	ınder 35 U.S.C. §§ 119 and 120				
13)	Acknowledgment is made of a claim for foreig	ın priority under 35 l	J.S.C. § 119(a)	-(d) or (f).	
a)[	☐ All b)☐ Some * c)☐ None of:				
	1. Certified copies of the priority documer	its have been receiv	ed.		
	2. Certified copies of the priority documer	its have been receiv	ed in Applicatio	n No	
* 9	3. Copies of the certified copies of the pri- application from the International B see the attached detailed Office action for a lis	ority documents hav ureau (PCT Rule 17	e been received	d in this National Stag	е
	cknowledgment is made of a claim for domes				lication).
a	) ☐ The translation of the foreign language particle. Acknowledgment is made of a claim for domes	ovisional application	has been rece	eived.	
Attachmen	t(s)				
2) Notic 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) 🔲 N		(PTO-413) Paper No(s) atent Application (PTO-152	
J.S. Patent and Tr PTOL-326 (R		Action Summary		Part of Paper	No. 12

Art Unit: 2122

## **DETAILED ACTION**

1. This action is in response to the Request for Reconsideration filed on August 12<sup>th</sup>, 2003.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1, 4-7, and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nevarez et al. (U.S. Patent Number 6,189,103) in view of Saliba et al. (U.S. Patent Number 6,052,710) and further in view of Narasimhan et al. (U.S. Patent Number 6,446,192) and Shaw et al. (U.S. Patent Number 5,867,712).

In regard to Claim 1, Nevarez teaches a web server and virtual machine residing on a server device (Figure 2, items 202 and 224), which runs an application (Figure 2, item 204).

Nevarez does not teach that the server is application-specific. Saliba, however, does teach using an application specific web server (Column 3, lines 36-40). Neither Nevarez nor Saliba teach libraries for forming the web server, and compiling the web server by selecting libraries required to form the web server on the device. Narasimhan, however, does teach forming a customized applet that is installed on a web server chip and provides the server chip with web server functionalities by allowing the chip to interface with a client (Column 8, lines 64-67 and Column 9, lines 1-8). Neither Nevarez, nor Saliba, nor Narasimhan teach that the libraries comprise a web server class library and a virtual machine class library with classes for different web

b

Art Unit: 2122

applications, where a particular application is selected to run on the device. Shaw, however, does teach application-specific classes, which a compiler selects to create an application, based on the application classes selected (Column 23, lines 8-14 and lines 39-43). Neither Nevarez, nor Saliba, nor Narasimhan, nor Shaw teach storing classes in a library, however, using a library is an well-known method of storing common files and classes. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to build a web server that contains a virtual machine, as taught by Nevarez, and where the server is application specific as taught by Saliba, where the building of the web server includes compiling selected classes which forms a web server, as taught by Narasimhan, where the classes are classes for different applications and where compiling an application includes selecting an application specific class and compiling the class to form the application, as taught by Shaw, since this allows many different applications to be formed quickly. Since Nevarez teaches software for a web server and a virtual machine, it would be obvious in view of Shaw that the web server was formed from a web server class and a virtual machine was formed from a virtual machine class. Claim 6 is a system step that corresponds with claim 1, and is rejected for the same reasons as claim 1.

In regard to Claims 4, 5, 7, 9, 11, and 12, for specific logic rejecting Claims 4, 5, 7, 9, 11, and 12, see the office action filed on October 10<sup>th</sup>, 2002.

In regard to Claim 10, Nevarez teaches a web server and virtual machine residing on a server device (Figure 2, items 202 and 224), which runs an application (Figure 2, item 204) that performs a function. Nevarez does not teach that the server is application-specific. Saliba, however, does teach using an application specific web server (Column 3, lines 36-40). Since the server is application specific, the virtual machine residing on the server must be application

Art Unit: 2122

specific. Neither Nevarez nor Saliba teach libraries for forming the web server, and compiling the web server by selecting libraries required to form the web server on the device. Narasimhan, however, does teach forming a customized applet that is installed on a web server chip and provides the server chip with web server functionalities by allowing the chip to interface with a client (Column 8, lines 64-67 and Column 9, lines 1-8). Neither Nevarez, nor Saliba, nor Narasimhan teach that the libraries comprise a web server class library and a virtual machine class library with classes for different web applications, where a particular application is selected to run on the device. Shaw, however, does teach application-specific classes, which a compiler selects to create an application, based on the application classes selected (Column 23, lines 8-14 and lines 39-43). Neither Nevarez, nor Saliba, nor Narasimhan, nor Shaw teach storing classes in a library, however, using a library is an well-known method of storing common files and classes. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to develop a web server structure for a device including a web application, a web server and virtual machine, as taught by Nevarez, where the web server and virtual machine are application-specific as taught by Saliba, and the web server and virtual machine are compiled from classes, as taught by Narasimhan, where the classes are application classes for forming different applications, as taught by Shaw, since this allows many different applications to be formed quickly. Since Nevarez teaches software for a web server and a virtual machine, it would be obvious in view of Shaw that the web server was formed from a web server class and a virtual machine was formed from a virtual machine class.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nevarez et al. (U.S. Patent Number 6,189,103) in view of Saliba et al. (U.S. Patent Number 6,052,710) and

Application/Control Number: 09/430,877 Page 5

Art Unit: 2122

further in view of Narasimhan et al. (U.S. Patent Number 6,446,192), Shaw et al. (U.S. Patent Number 5,867,712), and Breslau et al. (U.S. Patent Number 5,761,512).

In regard to Claim 2, Nevarez, Saliba, Narasimhan, and Shaw teach the method of Claim 1, but do not teach further receiving at a compiler the libraries and the web application, the compiler parsing the libraries to select the classes that correspond to the web application.

Breslau, however, teaches parsing the library of classes (Figure 3, item 31) in order to select the class that corresponds to the application (Figure 3, items 53 and 59). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to perform the method of Claim 1, where the compiler receives the libraries and the web application, the compiler parsing the libraries to select the classes that correspond to the web application, as taught by Breslau, since this allows the compiler to automatically extract the correct classes without the user having to send the exact classes to the compiler.

5. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narasimhan (U.S. Patent Number 6,446,192) in view of Breslau (U.S. Patent Number 5,761,512) and further in view of Madany (U.S. Patent Number 6,199,196).

In regard to Claims 3 and 8, for specific rejections of Claims 3 and 8, see the office action filed on October 10<sup>th</sup>, 2002 (paper number 2).

#### Response to Arguments

6. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Application/Control Number: 09/430,877

Art Unit: 2122

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Gross whose telephone number is (703) 305-0542. The examiner can normally be reached on Mon-Fri 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

**KAG** 

W. M. M. WEI ZHEN

NY: Mary patent Examin

Page 6